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EXAMINER	
SHEPPERD, ERIC W	

ART UNIT	PAPER NUMBER
2453	

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12/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/590,178	LEVESQUE ET AL.	
	Examiner	Art Unit	
	ERIC W. SHEPPERD	2453	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 September 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *09/29/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-23 are pending.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in France on 02/19/2004. It is noted, however, that applicant has not filed a certified copy of the FR 04/50315 application as required by 35 U.S.C. 119(b). Examiner has retrieved said foreign application and has entered it with this action.

Response to Amendment

3. In response the amendment filed 09/29/2009: Applicant has submitted replacement drawings and abstract and the corresponding objections are withdrawn. Applicant has amended the claims, and the objections and corresponding 35 USC § 112 rejections have been withdrawn.

Response to Arguments

4. Applicant's arguments filed 09/29/2009 have been fully considered but they are not persuasive.

Applicant argues with respect claims 16-23 being rejected under 35 U.S.C § 101 that "Nothing in the specification states or suggests that the access system, or its various elements, must or are implemented purely as a computer program". Examiner submits that the scopes of claims 16 and 21 as they stand including a "mediation module" which can be interpreted as either hardware or

software. As there is no explicit definition of "mediation module", claims 16-23 read under the broadest reasonable interpretation do not prevent the scope of the claims from including a system that is fully "software". The 35 USC § 101 rejection is maintained.

Applicant makes the assertion "Tonnby thus teaches a system that comprises a single network, i.e., the connectivity network (10)" and further argues that "Tonnby fails to teach or suggest that the access network comprises a multipath access network, as recited in independent claims 1, 16 and 17". Examiner respectfully disagrees and directs the applicant to Tonnby which recites "The access network may also be built up by more than one connectivity and transmission network. Existing types of connectivity networks, such as ATM networks, IP networks, frame-relay networks, digital broadcasting networks and broadband radio networks, are easily adaptable for acting as the connectivity network of a general access system" (page 19 lines 9-14). As such, Tonnby discloses an access network comprising multiple networks with multiple technologies.

All other arguments presented by Applicant either re-hash or rely upon the issues addressed above, and are also not persuasive for the reasons given above.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 16-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

7. Regarding claims 16 and 21, the claimed invention "comprising a mediation module" as software *per se* (specification of the application makes no reference as to whether "mediation module" is hardware or software, nor can it be adequately inferred by one of ordinary skill in the art that the "mediation module" is limited to hardware or a combination of hardware and software), does not fall within at least one of the four categories of patent eligible subject matter recited in 35 USC § 10 (process, machine, manufacture, or composition of matter)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-12 and 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tonnby et al (WO 98/24224), in view of Baum et al (US 6,850,495 B1).

10. As to claim 1, Tonnby substantially discloses a method used by a terminal to access via a multipath access network a service made available on a communication network by a service provider (Tonnby Abstract), the method comprising the steps of:

supplying a mediation module ("Access Adapters" Tonnby Fig. 1 item 40; page 16 lines 20-23 *access adapters connected to service providing networks*) with information from the service provider ("Service Providing Networks" Tonnby Fig. 1 item 50) which relates to at least an address of said service in the communication network (Tonnby page 16 lines 21-29 *adapters are associated with at least one address and a set of service primitives*),

determining, at the mediation module an identifier to be used by the terminal to access said service via the multipath access network (Tonnby page 19 lines 9-14 *access network comprising multiple networks of different technologies*) and associating said identifier with said information supplied by the service provider (Tonnby page 21 lines 16-31 *access adapter means having means to uniquely relate a distributed service access point*); and

receiving, at the terminal ("Network Terminal" Tonnby Fig. 1 item 20) said identifier associated with said information from the mediation module during service discovery (Tonnby page 16 lines 25-27 *for each specific communication between network terminal and access adapter, a specific set of service primitives is used*).

Tonnby fails to explicitly disclose a path identifier.

Baum describes a method of limiting or controlling access to various

services via a firewall.

With this in mind, Baum discloses a path identifier ("VPI" Baum Fig. 29 item 2982 *virtual path identifiers*). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to combine the method of Baum with the system of Tonnby as it would allow control of "access to various services and locations" (Baum column 28 lines 49-51).

11. As to claim 2, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 1, including wherein the multipath access network is a multichannel access network and said path identifier comprises a location identifier of a channel of said multichannel access network to be used by the terminal ("VCI" Baum Fig. 29 item 2984 *virtual channel identifier*).

12. As to claim 3, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 2, including wherein the mediation module determines which multichannel access network to use and receives said location identifier from said multichannel access network (Tonnby page 16 lines 25-27 *for each specific communication between network terminal and access adapter, a specific set of service primitives is used*).

13. As to claim 4, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 2, including wherein said multichannel access network utilizes Digital Video Broadcasting (DVB) signaling (Tonnby page 6 line 29-page 7 line 2 *Digital Video Broadcasting (DVB)*).

14. As to claim 5, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 2, including wherein said path identifier further comprises a technology identifier of said multichannel access network (Tonnby page 47 Claim 51 *physical interfaces with respective link protocol for connectivity network common to said physical interface*; "Protocol" Baum Fig. 32 item 3235 *stored on mediation device*).

15. As to claim 6, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 5, including wherein said multichannel access network utilizes Digital Audio Broadcasting (DAB) signaling (Tonnby page 6 line 29-page 7 line 2 *Digital Audio Broadcasting (DAB)*).

16. As to claim 7, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 6, including wherein said path identifier comprises a parameter pair comprising service ID (Sid) and service component (SCIds) (Baum column 8 lines 3-11 *context information comprising class of service and extended quality of service information*).

17. As to claim 8, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 2, including wherein said terminal is tuned to a channel corresponding to said path identifier (Tonnby page 16 lines 25-27 *for each specific communication between network terminal and access adapter, a specific set of service primitives is used*).

18. As to claim 9, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 1, including wherein the multipath access network comprises a plurality of access network interfaces of the terminal and said path identifier is an identifier of at least one technology to be used (Tonnby page 41 claim 7 *set of terminal adapters*; Tonnby page 21 lines 23-26 *delivers to an adapter in the network terminal corresponding to the same technology of the sending access adapter*).

19. As to claim 10 the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 9, including wherein the mediation module determines which access technology to use (Tonnby page 21 lines 23-26 *delivers to an adapter in the network terminal corresponding to the same technology of the sending access adapter*).

20. As to claim 14 the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 9, including wherein said terminal is connected to an access network interface corresponding to said path identifier

(Tonnby page 41 claim 7 *set of terminal adapters connected to respective networks*).

21. As to claim 15, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 1, including wherein the information received by the mediation module from the service provider also relates to the service (Tonnby page 16 lines 21-29 *adapters are associated with at least one address and a set of service primitives*).

22. As to claim 16, Tonnby substantially discloses an access system used by a terminal to access via a multipath access network a service made available on a communication network by a service provider, wherein said access ystem comprises a mediation module ("Access Adapters" Tonnby Fig. 1 item 40) configured:

to receive from the service provider ("Service Providing Networks" Tonnby Fig. 1 item 50; Tonnby page 16 lines 20-23 *access adapters connected to service providing networks*) information relating to at least an address of said service in the communication network (Tonnby page 16 lines 21-29 *adapters are associated with at least one address and a set of service primitives*),

to determine an identifier to be used by the terminal to access said service via the multipath network (Tonnby page 19 lines 9-14 *access network comprising multiple networks of different technologies*) and to associate said identifier with said information supplied by the service provider (Tonnby page 21 lines 16-31

access adapter means having means to uniquely relate a distributed service access point), and

to supply the terminal ("Network Terminal" Tonnby Fig. 1 item 20) with said information during service discovery (Tonnby page 16 lines 25-27 *for each specific communication between network terminal and access adapter, a specific set of service primitives is used*).

Tonnby fails to explicitly disclose a path identifier.

Baum describes a method of limiting or controlling access to various services via a firewall.

With this in mind, Baum discloses a path identifier ("VPI" Baum Fig. 29 item 2982 *virtual path identifiers*). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to combine the method of Baum with the system of Tonnby as it would allow control of "access to various services and locations" (Baum column 28 lines 49-51).

23. As to claim 17, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 16, including wherein the multipath access network is a multichannel access network, and the mediation module is further configured to determine which multichannel access network to use and receives from said multichannel access network a location identifier of a channel to be used by the terminal ("VCI" Baum Fig. 29 item 2984 *virtual channel*

identifier).

24. As to claim 18, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 16, including wherein the multipath access network comprises a plurality of interfaces used by the terminal to access communication networks (Tonnby page 41 claim 7 *set of terminal adapters*) and the mediation module is configured to determine which access technology to use (Tonnby page 21 lines 23-26 *delivers to an adapter in the network terminal corresponding to the same technology of the sending access adapter*).

25. As to claim 19, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 16, including wherein said terminal is configured to be tuned to a channel corresponding to said path identifier (Tonnby page 16 lines 25-27 *for each specific communication between network terminal and access adapter, a specific set of service primitives is used*).

26. As to claim 20, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 16, including wherein said terminal is configured to be connected to a network interface corresponding to said path identifier (Tonnby page 41 claim 7 *set of terminal adapters connected to respective networks*).

27. As to claim 21, Tonnby substantially discloses a mediation module for an access system used by a terminal to access via a multipath access network a service made available on a communication network by a service provider, wherein said mediation module is configured:

to receive from the service provider ("Service Providing Networks" Tonnby Fig. 1 item 50; Tonnby page 16 lines 20-23 *access adapters connected to service providing networks*) information relating to at least an address of said service in the communication network (Tonnby page 16 lines 21-29 *adapters are associated with at least one address and a set of service primitives*),

to determine an identifier to be used by the terminal to access said service via the multipath network (Tonnby page 19 lines 9-14 *access network comprising multiple networks of different technologies*) and to associate said identifier with said information supplied by the service provider (Tonnby page 21 lines 16-31 *access adapter means having means to uniquely relate a distributed service access point*), and

to supply the terminal ("Network Terminal" Tonnby Fig. 1 item 20) with said information during service discovery (Tonnby page 16 lines 25-27 *for each specific communication between network terminal and access adapter, a specific set of service primitives is used*).

Tonnby fails to explicitly disclose a path identifier.

Baum describes a method of limiting or controlling access to various services via a firewall.

With this in mind, Baum discloses a path identifier ("VPI" Baum Fig. 29

item 2982 *virtual path identifiers*). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to combine the method of Baum with the system of Tonnby as it would allow control of "access to various services and locations" (Baum column 28 lines 49-51).

28. As to claim 22, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 21, including wherein the access network is a multichannel access network and the mediation module is further configured to determine which multichannel access network to use and receives from said multichannel access network a location identifier of a channel to be used by the terminal ("VCI" Baum Fig. 29 item 2984 *virtual channel identifier*).

29. As to claim 23, the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 21, including wherein the multipath access network comprises a plurality of interfaces used by the terminal to access networks (Tonnby page 41 claim 7 *set of terminal adapters*) and the mediation module is further configured to determine which access technology to use (Tonnby page 21 lines 23-26 *delivers to an adapter in the network terminal corresponding to the same technology of the sending access adapter*).

30. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tonnby et al (WO 98/24224), in view of Baum et al (US 6,850,495 B1), in

view of Lang et al (US 6,188,699 B1).

31. As to claim 11 the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 10, failing however to explicitly include wherein if a plurality of technologies is useable the mediation module defines a relative priority said plural technologies.

Lang describes a multi-channel network device for interfacing between a plurality of physical data links and a control processor.

With this in mind, Lang discloses wherein if a plurality of technologies is useable the mediation module defines a relative priority of said plural technologies (Lang column 13 lines 49-58 *interfaces lines are processed in a priority basis (i.e. fastest first)*). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the sending/receiving prioritization of the device of Lang with the access adapters of the system of the above combined arts of Tonnby and Baum as it would advantageously enable support for "large number of data links operating at high speeds" (Lang column 1 lines 41-42).

32. As to claim 12 the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 10, failing however to explicitly include wherein if a plurality of technologies is useable the terminal defines a relative priority of said plural technologies.

Lang discloses wherein if a plurality of technologies is useable the

terminal defines a relative priority of said plural technologies (Lang column 13 lines 49-58 *interfaces lines are processed in a priority basis (i.e. fastest first)*). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the sending/receiving prioritization of the device of Lang with the network terminal of the system of the above combined arts of Tonnby and Baum as it would advantageously enable support for "large number of data links operating at high speeds" (Lang column 1 lines 41-42).

33. As to claim 13 the above combined art of Tonnby and Baum disclose the invention as claimed as described in claim 10, failing however to explicitly include wherein if a plurality of access network interfaces exist for a given technology, the terminal determines which access network interface to use.

Lang discloses wherein if a plurality of access network interfaces exist for a given technology, the terminal determines which access network interface to use (Lang column 13 lines 49-58 *interfaces lines are processed in a priority basis (i.e. fastest first)*). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the sending/receiving prioritization of the device of Lang with the network terminal of the system of the above combined arts of Tonnby and Baum as it would advantageously enable support for "large number of data links operating at high speeds" (Lang column 1 lines 41-42).

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reisman (US 2005/0044280 A1) is relevant to multipath access networks.

35. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC W. SHEPPERD whose telephone number is (571)270-5654. The examiner can normally be reached on Monday - Thursday, Alt. Friday, 7:30 AM - 5PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (571)272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. W. S./
Examiner, Art Unit 2453

/THUHA T. NGUYEN/
Primary Examiner, Art Unit 2453